

List of All Chemicals

P Scrophularia scorodonia (Scrophulariaceae)

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Plant Part	Low PPM	High PPM	StdDev	*Reference
6-METHOXYCATALPOL	Root	--	55.0		De Sandos, J., Fernandez, L., Diaz, A. M., Rubio, B., Ollivier, E., Faure, R., Balansard, G. 1998. Catalpol Glycosides from <i>Scrophularia scorodonia</i> . <i>Pharmazie</i> , 53(6): 427-428.
6-O-ALPHA-L-[3"-O-TRANS-P-COUMAROYL]-RHAMNOPYRANOSYLCATALPOL	Flower	--	27.0		De Sandos, J., Fernandez, L., Diaz, A. M., Rubio, B., Ollivier, E., Faure, R., Balansard, G. 1998. Catalpol Glycosides from <i>Scrophularia scorodonia</i> . <i>Pharmazie</i> , 53(6): 427-428.
8-ACETYLHARPAGIDE	Plant	--	--		Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.
Activities (1)					
Antiinflammatory IC50=19.5 uM	Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.				
8-O-ACETYLHARPAGIDE	Plant	--	--		Fernandez, L., Martin, T., Villaescusa, L., Bartolome, C., Rubio, B., Diaz, A. M. 1995. Rosmarinic Acid and Iridoids of <i>Scrophularia scorodonia</i> L. <i>Colloq Inst Natl Rech Agron</i> , 69: 307-308.
Activities (1)					
Cytotoxic ED50=>200-425 uM					
8-O-ACETYLHARPAGIDE	Leaf	--	0.002		Fernandez-Matellano, L., Ollivier, E., Diaz-Lanza, A. M., Faure, R., Balansard, G. 1995. Iridoids from <i>Scrophularia scorodonia</i> . <i>Planta Medica</i> , 61(1): 93.
Activities (1)					
Cytotoxic ED50=>200-425 uM					
8-O-CIS-CINNAMOYLHARPAGIDE	Shoot	--	0.001		Fernandez, L., Diaz, A. M., Ollivier, E., Faure, R., Balansard, G. 1995. An Iridoid Diglycoside Isolated from <i>Scrophularia scorodonia</i> . <i>Phytochemistry</i> , 40(5): 1569-1571.
AUCUBIN	Plant	--	--		Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.
Activities (20)					
Antibacterial					
Antidote (Amanitin) 200 mg/kg ipr mus	Advance in Chinese Medicinal Materials Research. 1985. Eds. H. M. Chang, H. W. Yeung, W. -W. Tso and A. Koo. World Scientific Publishing Co., Philadelphia Pa., page 276.				
Antiedemic 1/2 indomethacin	Bruneton, J. 1999. Pharmacognosy, Phytochemistry, Medicinal Plants. 2nd Ed. Lavoisier Publishing, Paris. 1119 pp.				
Antiinflammatory IC50=12-72 uM					
Antiinflammatory 1/2 indomethacin					
Antileukemic IC50=25-56 ug/ml	Chiang, L. C., Chiang, W., Chang, M. Y., Ng, L. T., Lin, C. C. 2003. Antileukemic activity of selected natural products in Taiwan. <i>Am J Chin Med</i> , 31(1):37-46.				
Antioxidant					
Antiprolactin					
Antistaphylococcic					
Candidicide					
Cathartic ED50=390 mg/kg	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)				
Collagenic					
Diuretic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Hepatoprotective					
Lactagogue	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.				
Laxative	Williamson, E. M. and Evans, F. J. Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.				
Paralytic	Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.				
Pesticide					

Philadelphia Pa., page 275.

Uricosuric Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

AUCUBOSIDE	Leaf	--	35.0	Fernandez-Matellano, L., Ollivier, E., Diaz-Lanza, A. M., Faure, R., Balansard, G. 1995. Iridoids from <i>Scrophularia scorodonia</i> . <i>Planta Medica</i> , 61(1): 93.
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BARTSIOSIDE	Leaf	--	30.0	Fernandez-Matellano, L., Ollivier, E., Diaz-Lanza, A. M., Faure, R., Balansard, G. 1995. Iridoids from <i>Scrophularia scorodonia</i> . <i>Planta Medica</i> , 61(1): 93.
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Activities (1)

Antiinflammatory IC50=4.3 uM	Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.
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BARTSIOSIDE	Plant	--	--	Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.
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Antiinflammatory IC50=4.3 uM	Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.
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BUDDLEJASAPONIN	Flower	--	4000.0	Emam, A. M., Diaz-Lanza, A. M., Matellano-Fernandez, L., Faure, R., Moussa, A. M., Balansard, G. 1997. Biological Activities of Buddlejasaponin Isolated from <i>Buddleja madagascariensis</i> and <i>Scrophularia scorodonia</i> . <i>Pharmazie</i> , 52(1): 76-77.
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HARPAGIDE	Plant	--	--	Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.
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Activities (6)

(-)-Chronotropic	
(-)-Inotropic	
Analgesic	
Antiarthritic	
Antiinflammatory	Planta Medica, 55(7): 626.
Calcium-Antagonist	Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.

HARPAGOSIDE	Plant	--	--	*
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Activities (6)

(+)-Inotropic	
(-)-Chronotropic	
Analgesic	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Antiarrhythmic	Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.
Antiinflammatory IC50=10 uM	
Calcium-Antagonist	Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.

HARPAGOSIDE	Flower	--	--	Diaz, A., et al. 1998. Reverse-Phase High Pressure Liquid Chromatographic Analysis of Harpagoside, Scorodoside and Verbascoside from <i>Scrophularia scorodonia</i> : Quantitative Determination of Harpagoside. <i>Planta Medica</i> , 64(1): 94-95.
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Activities (6)

(+)-Inotropic	
(-)-Chronotropic	
Analgesic	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Antiarrhythmic	Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.
Antiinflammatory IC50=10 uM	
Calcium-Antagonist	Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.

HARPAGOSIDE	Stem	--	--	Diaz, A., et al. 1998. Reverse-Phase High Pressure Liquid Chromatographic Analysis of Harpagoside, Scorodoside and Verbascoside from <i>Scrophularia scorodonia</i> : Quantitative Determination of Harpagoside. <i>Planta Medica</i> , 64(1): 94-95.
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Activities (6)

(+)-Inotropic	
(-)-Chronotropic	
Analgesic	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Antiarrhythmic	Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.
Antiinflammatory IC50=10 uM	
Calcium-Antagonist	Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.

Activities (6)

(+)-Inotropic			
(-)-Chronotropic			
Analgesic			Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Antiarrhythmic			Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.
Antiinflammatory IC50=10 uM			
Calcium-Antagonist			Iwu, M.M. 1993. Handbook of African Medicinal Plants. CRC Press, Boca Raton, FL 435 pp.

ROSMARINIC-ACID

Plant	--	--	Fernandez, L., Martin, T., Villaescusa, L., Bartolome, C., Rubio, B., Diaz, A. M. 1995. Rosmarinic Acid and Iridoids of Scrophularia scorodonia L. Colloq Inst Natl Rech Agron, 69: 307-308.
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Activities (57)

ABeta-Inhibitor			
Adenylate-Cyclase-Inhibitor			
Aldose-Reductase-Inhibitor			
AntiHIV EC50=40 ug/ml			
Antiaggregant			Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Antiallergic			
Antialzheimeran			
Antianaphylactic 1-100 mg/kg orl			Int. J. Immunopharmacology. Vol 10: 729, 1988.
Antianaphylactic ID50=1 mg/kg ivn rat			
Antianaphylactic ID50=10 mg/kg ims rat			
Antiatherosclerotic IC50=0.74 uM			
Antibacterial			Planta Medica, 55: 663.
Anticoagulant			Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Anticomplementary 1/2 aspirin			
Anticomplementary 20 mg/kg ivn			Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Antidepressant			
Antiedemic 0.316-3.16 mg/kg ims			Int. J. Immunopharmacology. Vol 10: 729, 1988.
Antigonadotropic			
Antihemolytic IC70=5-10 um/l			Int. J. Immunopharmacology. Vol 10: 729, 1988.
Ant hepatotoxic			
Antiherpetic 50 ug/ml			Vlietinck, A.J. and Domisse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Antiherpetic EC50=20 ug/ml			
Antihyperthyroid			
Antiinflammatory IC~58=1,000 uM			
Antiintegrase 10 ug/ml			
Antileukotriene			
Antilipoperoxidant			
Antimutagenic			
Antinephritic			
Antioxidant EC50=2.7 ug/ml	Parveen, N. 1991. Antifilarial Activity of Vitex negundo Against Setaria cervi. Fitoterapia, 62(2): 163, 1991.		
Antioxidant 10 uM			
Antioxidant (LDL) IC50=0.74 uM			
Antiplaque			
Antiproliferant			
Antiprostaglandin 20 mg/kg ivn	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.		
Antiproteolytic IC50=0.9 mol l	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.		
Antipulmonotic	Tyler, V.E.. 1994.		
Antiradicular			
Antishock			Int. J. Immunopharmacology. Vol 10: 735, 1988.
Antithyreotropic			
Antithyroid			Jim Duke's personal files.
Antiuremic			
Antiviral EC50=40 ug/ml			
Anxiolytic			
Apoptotic			
COX-1-Inhibitor IC58=1,000 uM			

IC>58=1,000 uM

Calcium-Antagonist

IC50=1.2 uM rbt

Cancer-Preventive

Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.

Cytotoxic TC50=100-150 ug/ml

Deiodinase-Inhibitor

Jim Duke's personal files.

Immunomodulator

Immunostimulant

Lipoxygenase-Inhibitor

Neuroprotective

Pesticide

Radioprotective

SACCATOSIDE	Flower	--	29.0	De Sandos, J., Fernandez, L., Diaz, A. M., Rubio, B., Ollivier, E., Faure, R., Balansard, G. 1998. Catalpol Glycosides from <i>Scrophularia scorodonia</i> . <i>Pharmazie</i> , 53(6): 427-428.
SCORODIOSIDE	Plant	--	--	Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.
SCORODIOSIDE	Stem	--	--	Diaz, A., et al. 1998. Reverse-Phase High Pressure Liquid Chromatographic Analysis of Harpagoside, Scorodoside and Verbascoside from <i>Scrophularia scorodonia</i> : Quantitative Determination of Harpagoside. <i>Planta Medica</i> , 64(1): 94-95.
SCORODIOSIDE	Leaf	--	--	Diaz, A., et al. 1998. Reverse-Phase High Pressure Liquid Chromatographic Analysis of Harpagoside, Scorodoside and Verbascoside from <i>Scrophularia scorodonia</i> : Quantitative Determination of Harpagoside. <i>Planta Medica</i> , 64(1): 94-95.
SCORODIOSIDE	Shoot	--	61.0	Fernandez, L., Diaz, A. M., Ollivier, E., Faure, R., Balansard, G. 1995. An Iridoid Diglycoside Isolated from <i>Scrophularia scorodonia</i> . <i>Phytochemistry</i> , 40(5): 1569-1571.
SCROPOLIOSIDE-B	Plant	--	--	Benito, P. B., Lanza, A. M. D., Sen, A. M. S., Galindez, J. D., Matellano, L. F., Gomez, A. S., Martinez, M. J. A. 2000. Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. <i>Planta Medica</i> , 66(4): 324-328.
SCROPOLIOSIDE-B	Root	--	38.0	De Sandos, J., Fernandez, L., Diaz, A. M., Rubio, B., Ollivier, E., Faure, R., Balansard, G. 1998. Catalpol Glycosides from <i>Scrophularia scorodonia</i> . <i>Pharmazie</i> , 53(6): 427-428.
SYRINGIN	Stem	--	--	*

Activities (9)

ACE-Inhibitor

Adaptogenic

Anticomplementary

Antipyretic

Antistress

Immunomodulator

Immunostimulant

Neurotropic

Tonic

VERBASCOSIDE	Flower	--	--	Diaz, A., et al. 1998. Reverse-Phase High Pressure Liquid Chromatographic Analysis of Harpagoside, Scorodoside and Verbascoside from <i>Scrophularia scorodonia</i> : Quantitative Determination of Harpagoside. <i>Planta Medica</i> , 64(1): 94-95.
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Activities (20)

Aldose-Reductase-Inhibitor
IC50=0.39-15.1 uM

Analgesic Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. *Herbal Medicine - A Guide for Health-care Professionals*. The Pharmaceutical Press, London. 296pp.

Antibacterial

Antifeedant

Antihepatotoxic Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Antihypertensive Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. *Herbal Medicine - A Guide for Health-care Professionals*. The Pharmaceutical Press, London. 296pp.

Antiinflammatory Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Antileukemic ED50=2.6 ug/ml

Antioxidant ED50=1 uM Seidel, V., Verholle, M., Malard, Y., Tillequin, F., Fruchart, J-C., Duriez, P., Bailleul, F., Teissier, E. 2000. Phenylpropanoids from *Ballota nigra* L. Inhibit in vitro LDL Peroxidation. *Phytotherapy Research*, 14(2): 93-98.

Antiseptic

Antistaph

Antitumor

Cytotoxic ED50=2.6 ug/ml

Fungicide MIC=0.4 mg/ml

Londón. 791 pp.

Immunosuppressant

Lipoxygenase-Inhibitor

PKC-Inhibitor

Pesticide

Phytoalexin

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, Londón. 791 pp.

VERBASCOSIDE

Stem -- --

Diaz, A., et al. 1998. Reverse-Phase High Pressure Liquid Chromatographic Analysis of Harpagoside, Scorodioside and Verbascoside from *Scrophularia scorodonia*: Quantitative Determination of Harpagoside. *Planta Medica*, 64(1): 94-95.

Activities (20)

Aldose-Reductase-Inhibitor
IC₅₀=0.39-15.1 uM

Analgesic

Antibacterial

Antifeedant

Antihepatotoxic

Antihypertensive

Antiinflammatory

Antileukemic ED₅₀=2.6 ug/ml

Antioxidant ED₅₀=1 uM

Antiseptic

Antistaph

Antitumor

Cytotoxic ED₅₀=2.6 ug/ml

Fungicide MIC=0.4 mg/ml

Hypertensive

Immunosuppressant

Lipoxygenase-Inhibitor

PKC-Inhibitor

Pesticide

Phytoalexin

Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, Londón. 791 pp.

Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

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Seidel, V., Verholle, M., Malard, Y., Tillequin, F., Fruchart, J-C., Duriez, P., Bailleul, F., Teissier, E. 2000. Phenylpropanoids from *Ballota nigra* L. Inhibit in vitro LDL Peroxidation. *Phytotherapy Research*, 14(2): 93-98.

VERBASCOSIDE

Leaf -- --

Diaz, A., et al. 1998. Reverse-Phase High Pressure Liquid Chromatographic Analysis of Harpagoside, Scorodioside and Verbascoside from *Scrophularia scorodonia*: Quantitative Determination of Harpagoside. *Planta Medica*, 64(1): 94-95.

Activities (20)

Aldose-Reductase-Inhibitor
IC₅₀=0.39-15.1 uM

Analgesic

Antibacterial

Antifeedant

Antihepatotoxic

Antihypertensive

Antiinflammatory

Antileukemic ED₅₀=2.6 ug/ml

Antioxidant ED₅₀=1 uM

Antiseptic

Antistaph

Antitumor

Cytotoxic ED₅₀=2.6 ug/ml

Fungicide MIC=0.4 mg/ml

Hypertensive

Immunosuppressant

Lipoxygenase-Inhibitor

PKC-Inhibitor

Pesticide

Phytoalexin

Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, Londón. 791 pp.

Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, Londón. 791 pp.

Seidel, V., Verholle, M., Malard, Y., Tillequin, F., Fruchart, J-C., Duriez, P., Bailleul, F., Teissier, E. 2000. Phenylpropanoids from *Ballota nigra* L. Inhibit in vitro LDL Peroxidation. *Phytotherapy Research*, 14(2): 93-98.

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, Londón. 791 pp.

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, Londón. 791 pp.

